

United States, or by a state or its political subdivision, or by a foreign nation, and not engaged in commerce, must have one of the following:

(1) A Type I or II LORAN C receiver as defined in Section 1.2(e), meeting Part 2 (Minimum Performance Standards) of the Radio Technical Commission for Marine Services (RTCM) Paper 12-78/DO-100 dated December 20, 1977, entitled "Minimum Performance Standards (MPS) Marine Loran-C Receiving Equipment". Each receiver installed must be labeled with the information required under paragraph (b) of this section.

(2) A satellite navigation receiver with:

(i) Automatic acquisition of satellite signals after initial operator settings have been entered; and

(ii) Position updates derived from satellite information during each usable satellite pass.

(3) A system that is found by the Commandant to meet the intent of the statements of availability, coverage, and accuracy for the U.S. Coastal Confluence Zone (CCZ) contained in the U.S. "Federal Radionavigation Plan" (Report No. DOD-NO 4650.4-P, I or No. DOT-TSC-RSPA-80-16, I). A person desiring a finding by the Commandant under this subparagraph must submit a written application describing the device to the Assistant Commandant for Operations, 2100 Second Street SW., Washington, DC 20593-0001. After reviewing the application, the Commandant may request additional information to establish whether or not the device meets the intent of the Federal Radionavigation Plan.

NOTE: The Federal Radionavigation Plan is available from the National Technical Information Service, Springfield, Va. 22161, with the following Government Accession Numbers:

Vol 1, ADA 116468

Vol 2, ADA 116469

Vol 3, ADA 116470

Vol 4, ADA 116471

(b) Each label required under paragraph (a)(1) of this section must show the following:

(1) The name and address of the manufacturer.

(2) The following statement by the manufacturer:

This receiver was designed and manufactured to meet Part 2 (Minimum Performance Standards) of the RTCM MPS for Marine Loran-C Receiving Equipment.

(Sec. 12, 92 Stat. 1477 (33 U.S.C. 1231); 49 CFR 1.46(n)(4))

[CGD 81-081, 47 FR 58244, Dec. 30, 1982, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 96-026, 61 FR 33669, June 28, 1996; CGD 97-023, 62 FR 33365, June 19, 1997; USCG-1998-3799, 63 FR 35532, June 30, 1998]

#### § 164.42 Rate of turn indicator.

Each vessel of 100,000 gross tons or more constructed on or after September 1, 1984 shall be fitted with a rate of turn indicator.

[CGD 83-004, 49 FR 43468, Oct. 29, 1984]

#### § 164.43 Automatic Identification System Shipborne Equipment.

(a) Each vessel required to provide automated position reports to a Vessel Traffic Service (VTS) must do so by an installed Automatic Identification System Shipborne Equipment (AISSE) system consisting of a:

(1) Twelve-channel all-in-view Differential Global Positioning System (dGPS) receiver;

(2) Marine band Non-Directional Beacon receiver capable of receiving dGPS error correction messages;

(3) VHF—FM transceiver capable of Digital Selective Calling (DSC) on the designated DSC frequency; and

(4) Control unit.

(b) An AISSE must have the following capabilities:

(1) Use dGPS to sense the position of the vessel and determine the time of the position using Universal Coordinated Time (UTC);

(2) Fully use the broadcast type 1, 2, 3, 5, 6, 7, 9, and 16 messages, as specified in RTCM Recommended Standards for Differential NAVSTAR GPS Service in determining the required information;

(3) Achieve a position error which is less than ten meters (32.8 feet) 2 distance root mean square (2 drms) from the true North American Datum of 1983 (NAD 83) in the position information transmitted to a VTS;

(4) Achieve a course error of less than 0.5 degrees from true course over ground in the course information transmitted to a VTS;